

CLAIMS

1. A method of calibrating an antenna and receiver system having multiple channels, each channel comprising an antenna, feed cable and associated receiver components, the method comprising the steps of:
 - (i) applying a wideband calibration signal to each antenna feed, the wideband calibration signal having similar characteristics to an operational signal;
 - (ii) measuring a correlation response across a plurality of said channels;
 - 10 (iii) deriving an estimate of signal transfer response for each of said plurality of channels based on the correlation response; and
 - (iv) applying compensation factors for each of said plurality of channels derived from the estimate of signal transfer response.
- 15 2. A method according to claim 1, wherein said plurality of channels comprise all said multiple channels and wherein, at step (ii), the correlation response is measured with reference to said wideband calibration signal.
- 20 3. A method according to claim 1, wherein said plurality of channels comprise all but a selected one of said multiple channels and wherein, at step (ii), the correlation response is measured with reference to said selected one channel.
- 25 4. A method according to Claim 1, wherein said wideband calibration signal comprises a pseudo-random binary sequence modulated according to a modulation scheme providing similar modulation and bandwidth characteristics to those of the operational signal.

- 10 -

5. A method according to any one of the preceding claims wherein, at step (iii), deriving said estimate of signal transfer response comprises determining the delay through the respective channel.

5 6. A method according to any one of the preceding claims wherein, at step (iii), deriving said estimate of signal transfer response further comprises deriving phase characteristics of the respective channel.

10 7. A method according to any one of the preceding claims wherein, at step (iii), deriving said estimate of signal transfer response further comprises deriving amplitude characteristics of the respective channel.

8. A method according to any one of the preceding claims, further comprising the step of:

15 (v) repeating steps (i) to (iv) to compensate for changes in signal transfer response over one or more of said plurality of channels.